SHCHERBINA, V.I.

LAZAREV, A.A., inzhener; MITSYN, P.V., inzhener; NIKIFOROV, A.A., inzhener; ROZET, I.Ya., inzhener; TROITSKIY, I.F., inzhener; SHCHERBINA, V.I., inzhener; BALZHA, M.F., inzhener, redaktor; TRASHUTIN, I.Ya., inzhener, redaktor; PESTRYAKOV, A.I., redaktor; ORLOVA, V.V., tekhnicheskiy redaktor.

[Assembling and disassembling the "Stalinets-80" tractor] Razborka i sborka traktora "Stalinets-80." Pod red. M.F.Balzhi i I.IA.Trashutina. 4-e izd., ispr. i dop. Moskva, Gos. izd-vo selkhoz. lit-ry, 1954. 429 p. (MLRA 7:10)
(Tractors)

ACC NR: AP7004400 SOURCE CODE: UR/0226/67/000/001/0070/0072

AUTHOR: Vlasova, M. V.; Sorin, L. A.; Shcherbina, V. I.

ORG: Institute for the Study of Materials, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Study of rare earth metal hexaborides by the electron paramagnetic method

SOURCE: Poroshkovaya metallurgiya, no. 1, 1967, 70-72

TOPIC TAGS: gadolinium, europium, ~~gadolinium hexa~~boride, ~~europium~~ rare earth, hexaboride, paramagnetic absorption, skin effect, electron paramagnetic resonance, ~~hexaboride~~, magnetic ordering, metal physical property

ABSTRACT: A study was made of the physical properties of gadolinium and europium hexaborides (GdB_6 and EuB_6) by observing their electron paramagnetic resonance at 300 and 77K, and plotting their paramagnetic absorption curves at these temperatures. It was found that at 300K the line widths (in oersteds) and the spectroscopic splitting factor (g) were 460 oe and g = 2.01 for GdB_6, and 940 oe and g = 1.98 for EuB_6. At 70K these values were 520 oe and g = 2.03 for GdB_6,

Card 1/2

ACC NR: AP7004400

and 1080 oe and g = 2.15 for EuB_6. It is assumed that the increase in the spectroscopic splitting factor is due to failure to consider the weak skin effect at this temperature. The study showed that the broadening of resonance lines of paramagnetic absorption observed at low temperatures is evidently due to magnetic ordering below 77K. Orig. art. has: 2 figures. [Authors' abstract] [NT]

SUB CODE: 11, 20/SUBM DATE: 10Aug66/ORIG REF: 001/OTH REF: 006/

Card 2/2

SHCHERBINA, V. I.

M-7

USSR/Cultivated Plants. Technical Oleaceae, Sugar Plants

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1662

Author : G.T. Romanyuk, V.I. Shcherbina
Inst : Not Given
Title : Sunflower Selection and Seed Growing

Orig Pub : V sb.: Kratkiy otchet o nauchn.-issled. rabote Vses. n.-i. in-ta machish i efiromaslich. kul'tur VASKhNIL za 1955 g, Krasnodar, 1956, 26-31

Abstract : Results are presented of selection work at the auxiliary station of the Institute of Armavir During 1952-1955 in developing early-ripe, high-oily sunflower varieties and their further improvement in the process of the seed-growing. Characteristics of the best varieties and prospective strains are indicated.

Card : 1/1

COUNTRY : USSR
CATEGORY : Cultivated Plants. Commercial. Oleiferous. Sugar-Bearing. M
ABS. JOUR. : RZhBiol., No. 1, 1959, No. 1739

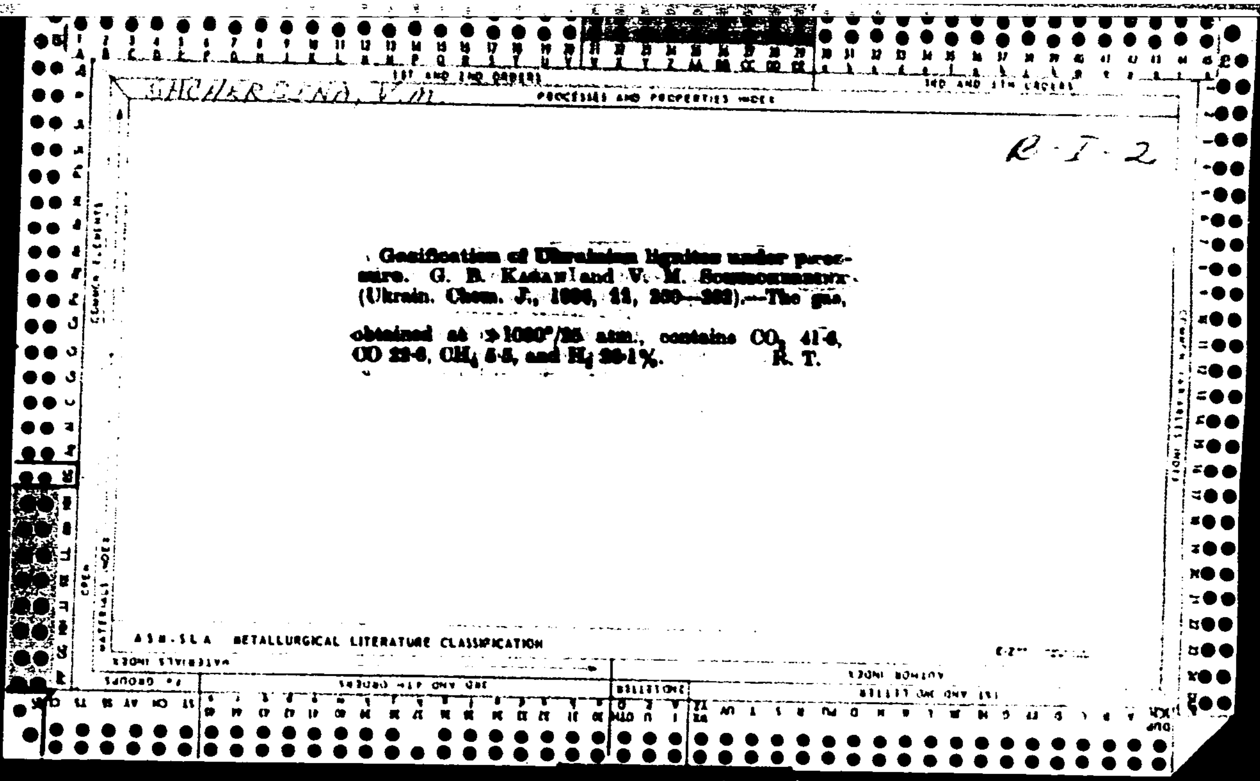
AUTHOR : [illegible], G.F.; [illegible], V.I.
INST. : All-Union Sci. Res. Inst. of Oleiferous and *
TITLE : Selection and Seed Growing of Sunflower.
: [illegible] in-[illegible] [illegible]
ORIG. PUB. : [illegible] 1955 [illegible], 1957, 36-40
ABSTRACT : At the Armavirskiy base, from a group of early-ripening sunflower varieties, in [illegible] variety [illegible] in the year 1956, first places [illegible] were taken by varieties [illegible] in the group of medium-ripening varieties, according to [illegible] criteria, a new variety [illegible]6 was isolated. In the process of the performed work, the productivity and oil [illegible] capacity of Armavirskiy [illegible]7 and the All-Union Research Institute of Oil [illegible] varieties were increased significantly in the years 195[illegible] and 195[illegible] according

CARD: 1/2 *Essential Oil-Bearing Crops.

SOBOLEV, M.A.; KRASIVSKAYA, A.A.; SHCHERBINA, V.I.

New method for the quantitative determination of cellulose. Izv.vyz. ucheb.zav.;tekh.teskt.prom. no.5:106-109 '60. (MIRA 13:11)

1. Kostromskoy tekstil'nyy institut.
(Cellulose) (Textile fibers)



SHCHERBINA, V.M.

R-I-2

Gasification of Ukrainian lignites under pressure. G. B. Kasatkin and V. M. Schtscherbina (Ukrain. Chem. J., 1936, 11, 280—282).—The gas, obtained at >1000°/25 atm., contains CO_2 41·4, CO 22·6, CH_4 5·5, and H_2 30·1%. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS
MATERIALS INDEX
AUTHOR INDEX

[illegible] :

CATEGORY : [illegible] M

ABS. JOUR. : RZhBiol., No. 3, 1959, No. 11175

AUTHOR : Shcherbina, O. A.

INST. : L'vov University

TITLE : On the Utilization of Ornamental Trees and Shrubs for Landscaping Highways.

ORIG. PUB. : Dopovidi ta povidomlennya. L'vivsk. un-t, 1957, vyp. 7, ch. 2, 46-47

ABSTRACT : It is reported that in Drogobychskaya Oblast' (Western Ukraine), in addition to forest varieties, there are being used fruit trees and ornamental shrubs and trees for landscaping the highways. On the section between the villages Antonovka-Mazurovka, there is being used Robinia pseudoacacia f. umbraculifera D. C. Plants grafted on tall trunks preserve a regular spherical shape without special care. In autumn, they do not lose the foliation for a long time and do not become yellow from frosts. They protect the highway well from the snow drifts. -- Ya. N. Ginevskiy

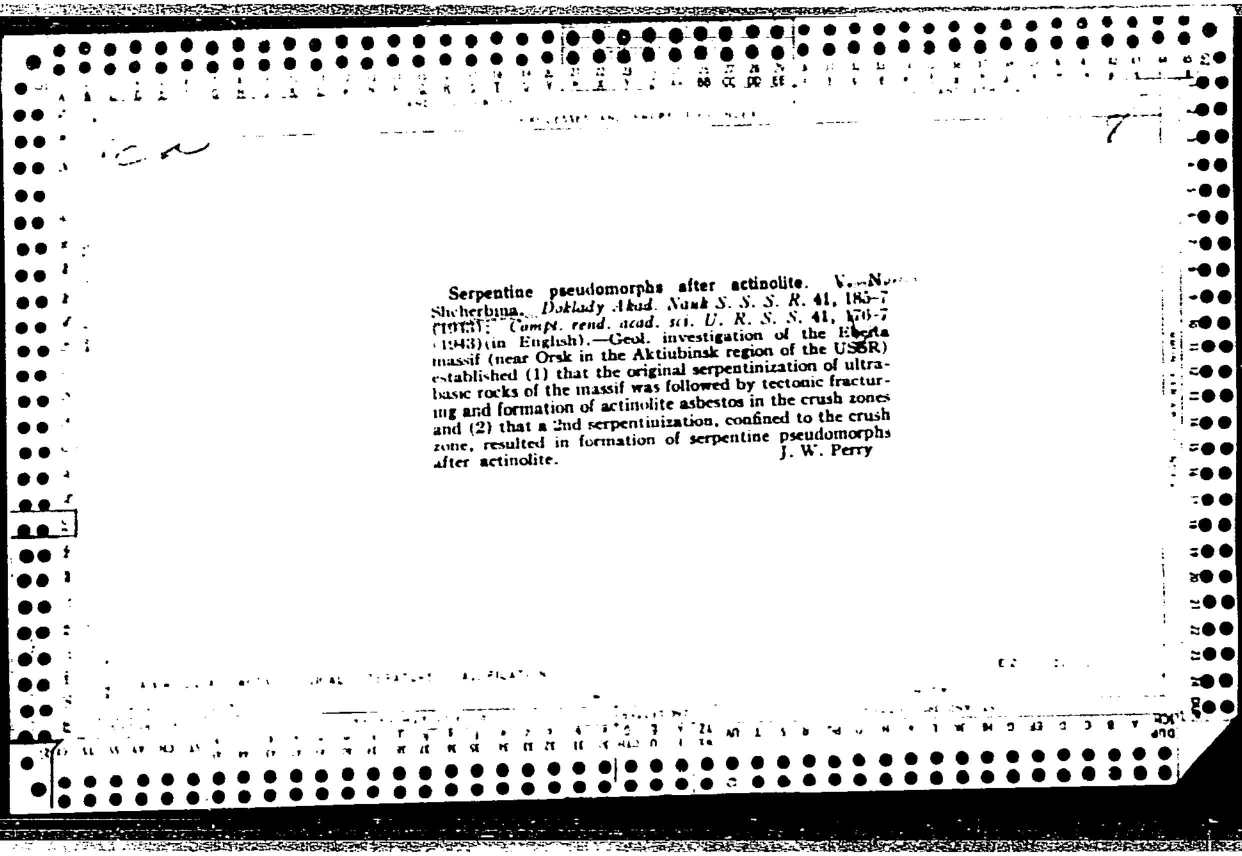
CARD: 1/1

Br Abs [illegible]HERBINA, V. N.

AI-11, Geochemistry

Serpentine pseudomorphs after actinolite. V. N. Schtscherbina (*Compt. rend. Acad. Sci. U.R.S.S.*, 1943, **41**, 176—177).—An original mineral formation encountered in the Ebeita serpentinite massif is shown to be a large pseudomorph of serpentine after radial actinolite. Its mineralogy is described and its origin is discussed.

L. S. T.



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Serpentine pseudomorphs after actinolite. V. N. Shcherbina. *Doklady Akad. Nauk S. S. S. R.* 41, 185-7 (1943); *Compt. rend. acad. sci. U. R. S. S.* 41, 176-7 (1943) (in English).—Geol. investigation of the Ebeta massif (near Orsk in the Aktiubinsk region of the USSR) established (1) that the original serpentinization of ultrabasic rocks of the massif was followed by tectonic fracturing and formation of actinolite asbestos in the crush zones and (2) that a 2nd serpentinization, confined to the crush zone, resulted in formation of serpentine pseudomorphs after actinolite.

J. W. Perry

SHCHERBINA, V. N.

FA 45/49T97

CHINA/Minerals Dec 48
Sulfates
Salt Deposits

"Glauberite in the Tertiary Salt-Bearing Deposits of Northern T'yan-Shan," V. N. Shcherbina, Geol Inst, Kirgiz Affiliate, Acad Sci USSR, 3 pp

"Dok Ak Nauk SSSR" Vol LXIII, No 4

In deposits investigated (Dzhel'dy-Su and Karan-Gulat in Chuyskiy valley, Kichik-Tuzin in Kochkorskiy valley and Kichi-Kul in Szhungol'skiy valley), glauberite forms an irregular impregnation of small (1-2 mm to microscopic) and large (up

45/49T97

CHINA/Minerals (Contd) Dec 48

to 6 cm) crystals and crystallic lattices in salt-bearing rocks. Glauberite content varies from a small percent to 20-25%, and even reaches 80-90% in some places. Submitted by Acad D. S. Belyankin, 4 Oct 48.

45/49T97

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CA

Genesis of mirabilite from salt deposits of northern Kirgisia. V. N. Shcherbina (Kirgisk. Filial Akad. Nauk S.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 67, 357-9(1949). Mirabilite is widespread in the Tertiary halite deposits of the Tyan-Shan, easily recognized from the efflorescence of Na_2SO_4. To date, the genesis of these sulfate minerals (mirabilite and thenardite) was assumed to be primary and syngenetic, from evapd. brines. S. concludes that *glauberite* is the most important primary mineral which is observed below the surface weathering zone. Mirabilite was formed as an epigenetic mineral from glauberite by circulating waters, with abundant gypsum as a second product. Chem. analyses of many Kirgisian mirabilite samples confirm this conclusion. Chlorides are usually scarce in the mirabilite-gypsum aggregates; the high NaCl content of some isolated occurrences indicates that halite-glauberite rocks were occasionally changed by circulating solns. Glauberite is still preserved in halite rocks of northern Kirgisia, which are mined at greater depths (about 570 m.). W. E.

7

5

Amorphous dolomite and dolomite calcite in the serpentinites of Kazakhstan. V. N. Shcherbina (Geol. Inst. Kirgizskogo Filiala Akad. Nauk S.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 72, 119-20(1950). A surprising similarity exists between the porcelain-like dense amorphous dolomites and Mg-contg. calcites, and the typical amorphous magnesite, which may be misleading in the mineral interpretation of the metasomatic products from ultrabasics. 20 chem. analyses of such minerals are given. The dense minerals occur in Kazakhstan, however, much more extensively than in Middle-European, serpentinite-derived carbonate rocks of this kind. The genesis of the amorphous dolomites is seen in a hydrothermal metasomatism of primary gabbro-peridotites with monoclinic pyroxenes, while the amorphous magnesites are derived from primary ultrabasic rocks with orthorhombic enstatitic pyroxenes, low in CaO. W. Eitel

CA

Y

Tertiary salt-bearing halite-sulfate region of Tyanshan. A. G. Bergman and V. N. Shcherbina (Geol. Inst., Kirgiz Sect., Acad. Sci. U.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 72, 1083-6(1950). The region represents a unique formation with peculiar paragenesis of salt minerals, being a residuum of an intracontinental, high-level high-sulfate water reservoir, or reservoir chain, which had never been connected to an ocean, thus differing sharply from oceanic compn. The basic minerals are gypsum, anhydrate, glauberite, NaCl, mirabilite, thenardite, and bloedite. Glauberite is found either dispersed or in thick massive sheets of 80-95% assay. Halite is found in close paragenesis with it, reaching several tenth %, or several % in various locations. Anhydrite is assocd. with it in small amts. (under 1%). In several intermountainous regions there is, instead, predominant deposition of glauberite assocd. with either gypsum, anhydride, halite, or thenardite; mirabilite is absent. Typical analyses are supplied. G. M. Kosolapoff

CA

8

Chemical and mineralogical composition of impurities in glauberite. V. N. Shcherbina (Kirgiz Branch Acad. Sci. U.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* **73**, 1021-4 (1950). — Natural glauberite, even in its purest specimens, does not have the theoretical compn. $Na_2SO_4.CaSO_4$, but contains excess $CaSO_4$, in the range of 0.11 to 4.12%, observed in 22 of 24 analyses. Only the glauberite from Leopoldshall (Stassfurt, Germany) is approx. ideal in its compn. In glauberite from the Tyan-Shan, S. observed inclusions of gypsum and anhydrite, in smallest, idiomorphic crystals. Glauberite from the Kochkova basin (Tertiary salt horizons) with 0.52% excess $CaSO_4$ shows on the heating curve beside the endothermic effect at 530° (decompn. of glauberite) a second weak effect at 120° (dehydration of gypsum) and at 375° (inversion of anhydrite). NaCl as an impurity is usually present in amts. up to 12.5%, also included in cubic crystals or filling veinlets in the massive glauberite. $CaCO_3$ and subordinate dolomite are observed in clayey material, or fine-dispersed aggregates, sometimes in zonal arrangement. The paragenesis of glauberite with gypsum, anhydrite, NaCl, and carbonates is typical for the Tertiary salts of Tyan-Shan. Glauberite from S. American occurrences often contains 1 to 5% B_2O_3, and those of Chile up to 38% nitrates, 1.2 to 8.3% $MgSO_4$, and excess Na_2SO_4 (not $CaSO_4$), in paragenesis with niter, bloedite, and thenardite. Glauberite from the European deposits is characterized by 0.30 to 1.29% $MgSO_4$, and up to 2.8% K_2SO_4, in paragenesis with polyhalite. W. Eitel

Glauberite twins. V. N. Shcherbina. *Doklady Akad. Nauk S.S.S.R.* **75**, 111-13(1950); cf. *C.A.* **45**, 1017*h*.—Glauberite is wide-spread in Tertiary salt deposits of the Tyan Shan, as a typical rock-forming mineral, but also crystd. on the walls of cavities (in druses up to 25 cm. diam.) with individuals up to 8 cm., while the granular rocks contain crystals of 0.5 to 0.8 mm. size. The habit of the well-developed crystals is usually tabular, rhomboid-formed. Prismatic types are rare; (001) and (111) are the usual forms, subordinate (110), striated parallel to the edge of (001):(111). Twins and twin groups of 2 to 5 individuals are here described for the first time; they have a typical M-shaped form. Only the tabular habit shows this twinning, never the prismatic. NaCl and clayish material fills the intestices between the crystals in the druses. W. Eitel

Shcherbina, V.N.

Tien Shan Tertiary halite-glauberite strata. V. N. Shcherbina. *Izvest. Kirgiz. Filiala, Akad. Nauk S.S.S.R.* 1951, Nos. 1-10, 84-93(in Russian); cf. *C.A.* 45, 4608*f*.—A stratigraphic and mineralogical discussion with 18 references. Gladys S. Macy

SHCHERBINA, V.N.

Processes of continental gypsum accumulations and their role in the formation of fossil gypsum sediments. Trudy Inst. geol. KirFAN SSSR no.2:5-15 '51. (MIRA 11:6)

(Gypsum)

[illegible]

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Glauberit, Glauberitoviye porody i ikh kora vyvetrivaniya (Glauberite, Glauberite Rocks, and their crust of Efflorescence) Frunze, Izd. Kirgizfan SSSR, 1952.
132 p. illus., diagrs., tables.
"Literatura": p. 128 - (131)
At head of title: Akademiya Nauk SSSR. Kirgizskiy Filial, Frunze. Institut Geologiy.

SHCHERBINA, V.

Geochemical properties of the elements titanium, niobium, tungsten of a diagonal series of the periodic system. VI. Doklady Akad. Nauk S.S.S.R. 85, 839-41 '52. (MLRA 5:8)
(CA 47 no.22:11824 '53)

SHCHERBINA, V.A.

Causality condition and the nonlocal nature of the Lagrangian in quantum electrodynamics. Dokl.AN SSSR 138 no.1:93-95 My-Je '61.
(MIRA 14:4)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo. Predstavleno akademikom N.N.Bogolyubovym.

(Quantum electrodynamics)

1. SHCHERBINA, V.N.

2. USSR (600)

4. Glauberite - Tien Shan

7. Review of the book "Glauberite, glauberitic formations their efflorescent crust."
V.N. Shcherbina, reviewed by D.S. Belyankin, Izv.AN SSSR. Ser.geol. no. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Unclassified.

SHCHERBINA, V.N.

Historicogeological factors in the formation of gypsum deposits.
Trudy Inst. geol. KirFAN no.4:9-15 '53. (MIRA 11:3)
(Gypsum)

SHCHERBINA, V. N.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kulture, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Shcherbina, V. N.	"Glauberite, Glauberitic Deposits, and Erosion Crust" and articles on a new type of mineralization of salt-bearing deposits	Kirgiz Affiliate, Academy of Sciences USSR

SO: W-30604, 7 July 1954

SHCHERBINA, V.N.

Mineral gypseous deposits of salt pans. Trudy Inst.geol.KirFan SSSR no.5:123-129 '54. (MLRA 9:12)

(Gypsum)

SHCHERBINA, V.N.

Characteristics of carbonate mineralization of gypsum- and salt-bearing deposits of Tertiary continental formations in intermontane basins of the Tien Shan. Trudy Inst.geol.AN Kir.SSR no.6:97-126 '55. (MLRA 10:2)

(Tien Shan--Geology, Stratigraphic)
(Carbonates (Mineralogy))

SHCHERBINA, V.N.; KASHIRIN, F.T., redaktor; TSYBINA, Ye.V., tekhnicheskiy redaktor

[Mineralogical, petrographic, and genetic characteristics of Tertiary continental saliferous and gypsiferous deposits of the Tien Shan intermontane depressions] Mineralogo-petrograficheskie i geneticheskie osobennosti tretichnykh kontinental'nykh solenosnykh i gipsonosnykh otlozhenii mezhgornykh vpadin Tian'-Shania. Frunze, Izd-vo Akademii nauk Kurgizskoi SSR, 1956. 182 p. (MIRA 10:1)
(Tien Shan--Geology, Stratigraphic)

LUKASHEV, K.I., akademik; LUPINOVICH, I.S., nauchnyy redaktor; SHCHERBINA, V.N., nauchnyy redaktor; KISHCHENKO, L., redaktor; GURVICH, G., tekhnicheskiy redaktor

[Geochemical types of weathering zones in Soviet territory] Zonal'nye geokhimicheskie tipy kory vyvetrivaniia na territorii SSSR. Minsk, Izd-vo Belorusskogo gos. univ. im. V.I.Lenina, 1956. 304 p. (MIRA 10:2)

1. Akademiya nauk BSSR (for Lukashev)
(Weathering) (Geochemistry)

SHCHERBINA, V.

Congress of the All-Union Mineralogical Society. Geokhimiia no.1:
91--92 '57. (MIRA 12:3)
(Mineralogy--Congresses)

Shcherbina, V.N.

3(5) PHASE I BOOK EXPLOITATION SOV/2077

Akademiya nauk Belorusskoy SSR, Minsk. Institut geologicheskikh nauk

Trudy, Vyp. 1 (Transactions of the Institute of Geological Sciences of the Belorussian SSR Academy of Sciences) Nr 1. Minsk, 1958. 227 p. 700 copies printed. Errata slip inserted.

Editorial Board: A.N. Avksent'yev, A.V. Fursenko, and V.N. Shcherbina; Ed. of Publishing House: Ye. G. Barabanova; Tech. Ed.: I. Volokhanovich.

PURPOSE: This issue of the Institute's Transactions is intended for geologists interested in both the physical and historical geology of Belorussia.

COVERAGE: This collection of articles on the geology of Belorussia has been prepared by members of that republic's Geological Institute. Individual papers discuss the prospects of future development of Belorussia's geological and geophysical studies, problems in the petrography of sedimentary rocks, and questions in paleontology and hydrogeology. Among the papers on historical geology are a study of the development of Foraminifera and one on spore-pollen analysis of Lower Carboniferous horizons. References accompany each article.

Transactions of the Institute (Cont.) SOV/2077

Balabushevich, I.A. Classification of Gravitational and Magnetic Anomalies 108

Bevmerzhitskaya, Z.M. The Lithologic-Mineralogic Characteristics of the Permian-Triassic Deposits in the Region of Olmevichev Grud Village 119

Shcherbina, V.N. A Method of Mass Determination of the Carbon Dioxide Content of Sedimentary Rocks 131

Lavrov, A.P. An Experimental Study of the Aqueous Properties of Porous Mineral and Organic Deposits in Areas of Excessive Humidity in the Western Part of the Russian Platform 145

Shevchenko, T.A. Authigenic Formations on Quartz and Feldspar Grains in Givetian and Lower-Frasnian Terrigenous Deposits of the Pripyatskiy Downwarp 168

Kurochka, V.P. "Galluazit" in the Phosphorite-containing Argillites of the Early Paleozoic of the Pridnestrov'ye 174

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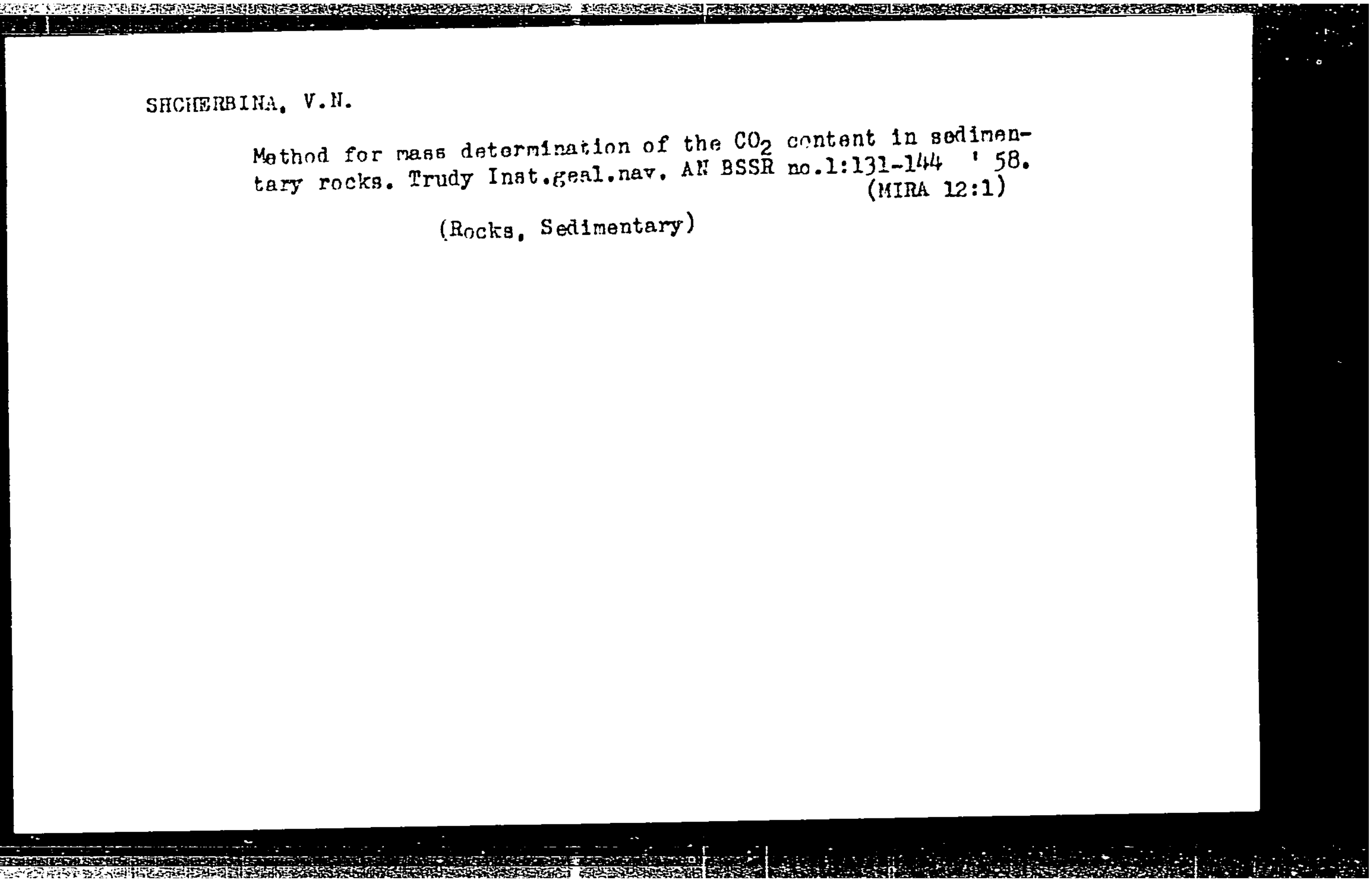

SHCHERBINA, V.N.

Method for mass determination of the CO_2 content in sedimentary rocks. Trudy Inst.geol.nav. AN BSSR no.1:131-144 '58.
(MIRA 12:1)

(Rocks, Sedimentary)

SHCHERBINA, V.N.

Role of carnallite in the mineralization of Devonian saliferous sediments of the Pripet fault. Dokl. AN BSSR 2 no.9:381-384 O '58.
(MIRA 12:7)

1. Chlen-korrespondent AN BSSR.
(Pripet Valley--Carnallite)

SHCHERBINA, V.N.

Types of sylvinite rocks in the Pripet salt basin. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.3:129-132 '59. (MIRA 13:3)

1. Chlen-korrespondent AN BSSR.
(Pripet Valley--Sylvinite)

SHCHERBINA, V.N.

Some characteristics of the occurrence of sylvite in disseminated sylvinite rocks of the Pripet Salt Basin. Vestsi AN BSSR.Ser.fiz.-tekh.nav. no.4:134-136 '59.
(MIRA 13:4)

1. Chlen-korrespondent AN BSSR.
(Pripet Valley--Sylvite)

SHCHERBINA, V.M. [Shcharbina, V.M.]

Composition of admixtures in rock salt from the Pripet salt basin. Vestsi AN BSSR.Ser.fiz.-tekh.nav. no.1:84-89 '60. (MIRA 13:6)
(Pripet Valley--Salt)

SHCHERBINA, V.N.

Tectonic problems in the peripheral framework of the Pripet graben.
Trudy Inst. geol. nav. An BSSR no. 2:3-14 '60. (MIRA 13:12)
(Pripet Valley--Geology, Structural)

SHCHERBINA, V.N.

Mineralogical and petrographic zones of the potassium horizons of the Pripet salt basin. Dokl.AN BSSR 4 no.2: 66-69 F '60. (MIRA 13:6)
(Pripet Valley--Potassium salts)

SHCHERBINA, V.N.

Ratio of carbonate-clay and sulfate components in halite and sylvinite rocks of the Pripet salt basin. Dokl.AN BSSR 4 no. 5:213-215 My '60. (MIRA 13:10)

1.Institut geologicheskikh nauk AN BSSR.
(Pripet Valley -Sylvite)

SHCHERBINA, V.N.

Structure of the saline formation in the Starobin deposit of potassium salts. Izv. vys. ucheb. zav.; geol. i razv. no.11: 82-89 N '60. (MIRA 14:2)

1. Beolorsskiy gosudarstvennyy universitet im. V.I.Lenina.
(Pripet Valley—Potassium salts)

S[illegible]

Water-soluble components of salt clays in the Starobin deposit.
Dokl. AN SSSR [illegible] no.11:772-773 [illegible] '63. (MIRA 17:9)

1. Institut geologii Gosudarstvennogo geologicheskogo komiteta SSSR.

SHCHERBINA, V.N.; ZAYTSEVA, N.V.

Composition of refractory clays of Stolin District in the White Russian S.S.R. Dokl. AN BSSR 9 no.2:111-114 F '65.
(MIRA 18:5)

1. Institut geologicheskikh nauk Gosudarstvennogo geologicheskogo komiteta SSSR.

TUNIK, A.A.; BEGUN, B.Ye.; DOBRYNINA, L.D.; SHCHERBINA, V.P.; LYUBARSKIY, I.M.

Kinetics of the crystallization and cooling of a large crankshaft casting. Lit. proizv. no.6:40-41 Je '62. (MIRA 15:6)
(Iron founding) (Cranks and crankshafts)

SHCHERBINA, V.P.

Portable light trap PSL-1 for collecting bloodsucking flying insects. Zool. zhur. 43 no.10:1569-1572 '64. (MIRA 17:12)

1. Department of Biology and Parasitology, S.M. Kirov Military Medical Academy (Leningrad).

L 44275-66 EWT(1)/T IJP(c) CC

ACC NR: AR6011855 SOURCE CODE: UR/0299/65/000/020/A004/A004

AUTHOR: Pervomayskiy, G. S.; Varonovskiy, Ya. M.; Shcherbina, V. P. 69 64 B

TITLE: Infrared ray method of investigating live subjects

21

SOURCE: Ref. zh. Biologiya, Abs. 20A41

REF SOURCE: Dokl. na 16-tom i 17-tom Yezhegodn. chteniyakh pamyati N.A. Kholodkovskogo, 1963-1964, M.-L., Nauka, 1965, 50-65

TOPIC TAGS: laboratory optic instrument, IR microscope, electron optics, animal physiology, behavior pattern

ABSTRACT: An electronic optical apparatus (EOP) consisting of an infrared irradiation source, viewing device, and a power unit is described. The viewing device represents a binocular image converter,55 tube (EOP) in the form of a telescope joined to a frontal catch by a hinged joint. The power unit consists of a power source (STs-25 storage battery), high voltage unit, and an infrared illuminator. The apparatus can operate on a self contained power source or on an AC line of 127 and 220 volts. An electronic optical device for infrared stereoscopic microscopy improved by the authors was used for higher magnification.

UDC: 542.98

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L 44275-66

ACC NR: AR6011855

In this device the EOP units described earlier were employed with the binocular joined to the eyepiece of an MBS-2 stereoscopic microscope by a screw clamp. Illumination of the subject with infrared rays was accomplished by using a special filter placed between the lamp and the collector of the MBS-2 illuminator. The given device makes it possible to obtain an enlarged (3.5X-119X) stereoscopic image of a subject with infrared rays by converting them into visible rays. Morphology and functions of biologic subjects during the night can be studied with this apparatus. Certain special reactions of some animals to infrared irradiation have been found. Certain behavioral characteristics have been established by visual observation of animals under conditions of darkness. N. Sharapova. /Translation of abstract/.

SUB CODE: 06, 09

Card 2/2 mjs

[illegible], [illegible]; [illegible], Ya.[illegible]; [illegible], V.I.

Use of infrared rays in stereoscopic microscopy. [illegible] no.7:1075-1078 '65. (MIRA 18:9)

1. Voyenno-meditsinskaya akademiya imeni Kirova, Leningrad.

1ST AND 2ND ORDERS

SHCHERBINA, V.V.

PROCESSES AND PROPERTIES INDEX

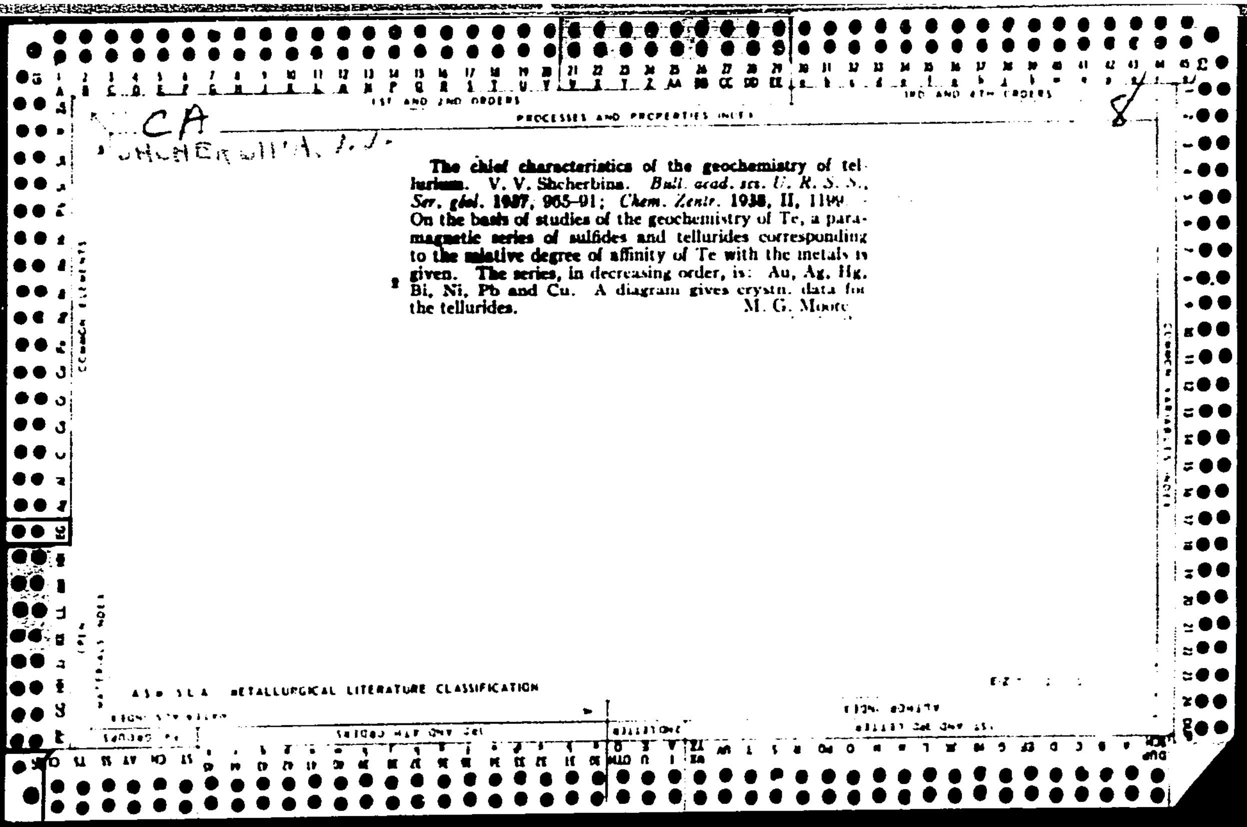
3RD AND 4TH ORDERS

Chemical constitution of the nephelites of Chibines mountains. V. V. Shcherbina. Compt. rend. acad. sci. U. R. S. S. 1931A, 216-22. A detailed analysis is given.

L. Tagutkeff

DOKL AN SSSR.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

SHCHERBINA, V.V.

8

The chief characteristics of the geochemistry of tellurium. V. V. Shcherbina. *Bull. acad. sci. U. R. S. S., Ser. geol.* **1937**, 965–91; *Chem. Zentr.* **1938**, II, 1199.—On the basis of studies of the geochemistry of Te, a paramagnetic series of sulfides and tellurides corresponding to the relative degree of affinity of Te with the metals is given. The series, in decreasing order, is: Au, Ag, Hg, Bi, Ni, Pb and Cu. A diagram gives crystn. data for the tellurides. M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Oxidation-reduction potentials as applied to the study of the paragenesis of minerals Vl. V. Shcherbina *Compt. rend. acad. sci. U. R. S. S.* 22, 503-6 (1939) (in English). The oxidation-reduction potentials of 18 ion pairs are given in v. for a 1 *N* soln. at 18°, including among others: V^{3+} → V^{4+} (+0.40 v.); U^{4+} → U^{6+} (+0.41 v.); Fe^{2+} → Fe^{3+} (+0.75 v.); Mo^{5+} → Mo^{6+} (+0.78 v.) and Pb^{2+} → Pb^{4+} (+1.80 v.). Any pair is an oxidizer with regard to any other pair of lower pos. potential. The paragenesis of ferrous and ferric compounds is an important guide to the oxidation-reduction state of natural mineral deposits. The ions Ti (3,4); V (3,4); Cr (3); Mo (5,6); Mn (2); Co (2); Ni (2); U (4,6); W (6); and Pb (2) may occur with Fe^{2+} but the ions V (5); Cr (6); Mn (4); Co (3); Ni (3); (IO$_3$)$^-$; (SO$_4$)$^{2-}$; (NO$_3$)$^-$; and Pb (4) may not occur with Fe^{2+}. The following may occur with Fe^{3+}: Ti (4); V (4,5); Cr (3,6); Mo (5,6); Mn (2,4); Co (2,3); Ni (2,3); U (6); (IO$_3$)$^-$; (NO$_3$)$^-$; (SO$_4$)$^{2-}$; and Pb (2,4), but Ti (3); V (3); U (4) may not occur with Fe^{3+}. A table is given showing graphically the effect of various ions on each other which is shown to explain the paragenesis of mineral deposits, e. g., Chili "Caliche" beds, blanket ores and the V beds of Suleiman-Saya and Ottavi in which V^{5+} occurs. The genesis of dzemanite, the formation of stichtite and volkonskoite instead of crocoite when chromite weathers, and failure of V to concentrate in weathering zones of Ural titanomagnetites is explained.

Lester W. Strock

COMMON ELEMENTS

OPEN

MATERIALS INDEX

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

SHCHERBINA, V. V.

4081 AEC-tr-3111 7 2

PROGRESS IN THE CHEMISTRY OF SCANDIUM DURING THE LAST TEN YEARS. V. V. Tscherbina. Translated by Elza Zvirbulis from Uspekhi Khim. 9, 1333-(7)(1940). 17p. 1

Distr: 4E4j PM

SHCHERBINA, Vladimir Vital'yevich, 1907

Geochemistry of rare elements Moskva, Gos, izd-vo geol. lit-ry, 1946- Maps.
(50-20779)

QD172.R2S38

1. Earths, Rare.

SHCHERBINA, V. V.

Concentration and dispersion of chemical elements in the earth's surface as a result of oxidative and reductive processes. V. V. Shcherbina. *Doklady Akad. Nauk S.S.S.R.* 67, 507-10(1949).—The generalized view of
oxidation reduction reactions as a means of distribution
of elements is presented. Oxidations tend to concen-
trate salts of heavy metals, formed by oxidation of acids
of V, Mo, Cr, As, Se, Te, S, and P; similarly, oxidation
of volatile elements also leads to their concn. (H, S, N).
However, some elements like Cu, U, Mo, Cr, and V (in
part) show decreased hydrolyzability on oxidation and
their concn. takes place after reduction reactions; this
group also contains Au, Ag, Cu, Bi, As (in part) and Pt
metals and C, as well as sulfides, selenides, and tellurides.
G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SAUKOV, A.A.; SHCHERBINA, V.V., otvetstvennyy redaktor; SEMENOVA, M.V.,
redaktor izdatel'stva; BORISOV, A.S., tekhnicheskiy redaktor

[Geochemistry] Geokhimiia. Izd. 2-oe, ispr. i dop. Moskva, Gos.
izd-vo geol. lit-ry, 1951. 381 p. (MLRA 9:7)
(Geochemistry) [Microfilm]

[illegible], [illegible]

[illegible] [illegible] [illegible] [illegible]. [illegible] [illegible]
[illegible]-Moskva, [illegible], [illegible].

SO: Monthly List of [illegible] Accessions, Vol. 7, No. 7, [illegible]

SHCHERBINA, V.V., redaktor, doktor geologo-mineralogicheskikh nauk; KURENKINA, I. Ye. [translator]

[Rare elements in ingeous rocks and minerals; collected articles] Redkie elementy v izverzhennykh gornykh porodakh i mineralakh; sbornik statei. Perevod s angliiskogo i nemetskogo I.E.Kurenkinoi [i dr.] Moskva, Izd-vo inostrannoi lit-ry, 1952. 399 p. (MLRA 6:5)
(Rocks, Ingeous) (Mineralogy) (Earths, Rare)

1. [illegible]

2. USSR (600)

4. Chemistry, Analytical - Problems, Exercises, etc.

7. A useful new book ("Manual of problems, exercises, and questions for the course in qualitative analysis." N. P. Komar'. Reviewed by V. V. Shcherbina). Zhur. anal. khim. 7, no. 6, 1952.

9. Monthly List of Russian Accessions. Library of Congress. March, 1953. Unclassified

USSR/Chemistry, Geochemistry - 1 Aug 52
Titanium, Columbium, Wolfram

"Geochemical Characteristics of the Elements of the Diagonal Series of the Periodic System Ti-Cb-W," Vl. V. Shcherbina

"Dok Ak Nauk SSSR" Vol 85, No 4, pp 839-841.

Establishes general chem and geochem relationships pertaining to naturally occurring compds of the metals in question. Points out similarities in the compn of minerals contg these 3 metals. Presented by Acad D.S. Belyankin 5 Jun 52.

227T18

SHCHERBINA, V. V.

[illegible]

[illegible]

[illegible]

[illegible]

SHCHERBINA, VL, V.

USSR/ Geology - Geochemistry

Card 1/1 Pub. 46 - 1/24

Authors : Shcherbina, Vl. V.

[redacted]

Title : The present state of geochemistry abroad

Periodical : Izv. AN SSSR, Ser. geol., 6, 3-14, Nov-Dec 1954

Abstract : The development of the science of geochemistry in countries outside of the USSR, especially in Australia, England and USA was discussed during the August 1953 First International Symposium on Geochemistry held in Zuerich, Switzerland. It is pointed out that the geochemical methods and ideas are continuously being introduced into contiguous sciences such as chemistry, physics, astronomy, technology, metallurgy and of course into geology. The names of most prominent foreign geochemists are listed. Forty-seven references: 5 USSR; 33 USA; 1 Norwegian; 1 Swedish; 4 German and 3 Dutch (1933-1954).

Institution : .....

Submitted : August 23, 1954

SHCHERBINA, V. V.

USSR/Geology - Book review

Card 1/1	:	Pub. 124 - 22/24
Authors	:	Shcherbina, V. V., Dr. of Geological-Mineralogical Sc.
Title	:	Progress of modern science. Book on ore deposits
Periodical	:	Vest. AN SSSR 9, 99-103, Sep 1954
Abstract	:	Critical review of the book by A. G. Betekhtin; F. I. Vol'fson; A. N. Zavaritskiy; D. S. Korzhinskiy; O. D. Levitskiy and V. A. Nikolaev, entitled, "Basic Problems of Teaching about Magmatogenic Ore Deposits", is presented.
Institution	:	...
Submitted	:	...

FERSMAN, A.Ye., akademik; BELOV, N.V., akademik,redaktor; VINOGRADOV, A.P., akademik, redaktor; SHCHERBAKOV, D.I., akademik, redaktor; KAPUSTINSKIY, A.F., redaktor; SAUKOV, A.A., redaktor; SHCHERBINA, V.V., doktor geologo-mineral'nykh nauk, redaktor; KUN, N.R., redaktor; MOSKVICHEVA, N.I., tekhnicheskiy redaktor.

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akademii nauk SSSR. Vol.3. 1955. 798 p. (MLRA 8:12)

1. Chlen-korrespondent AN SSSR (for Kapustinskiy and Saukov) (Geochemistry)

SHCHERBINA, V. V.

17

Geochemistry of the oxidation zone of ore deposits. V. V. Shcherbina. *Sovet. Geol., Sbornik* 43, 137–47(1955). Formation of supergene minerals is discussed. The presence or absence of some of these minerals can be used to reconstruct the chem. processes which formed the ore.
A. Volborth

SHCHERBINA, V.V.

3

New data on the geochemistry of copper in the supergene mineralization zone. V. V. Shcherbina and L. I. Ignatova. *Zapiski Vsesoyuz.* ~~*Mineralog. Obshchestva* 84~~, 353-4(1955); cf. Chukhrov, *C.A.* 45, 5077g; 49, 15645i.—For the occurrence of malachite in the oxidation zone of primary chalcopyrite deposits, the oxidation of the sulfide ore to sol. $CuSO_4$ and then the reaction of this salt with $CaCO_3$ in the country rock is typical. Chrysocolla, $CuSiO_3.H_2O$, is evidently pptd. in alk. solns. of Na_2SiO_3, with pH between 9.2 and 11.6. A sequence of pseudomalachite (Cu phosphate) changed to malachite changed to chrysocolla is often observed. The authors describe a complex-forming reaction between pseudomalachite and Na_2CO_3 to deep-blue solns. with 0.166 g. CuO/l. and 0.1182 g. P_2O_5/l. (pH 10.51) from which the double salts $Na_3PO_4.Na_2CO_3$ or $Na_3PO_4.2Na_2CO_3$ crystallize; blue ppts. of azurite are formed which are easily changed to oölitic malachite. The authors are of the opinion that in nature solns. of $NaHCO_3$, or better said, solns. of the equil. $Na_2HPO_4 + CO_2 + H_2O \rightleftharpoons NaHCO_3 + NaH_2PO_4$ are important media for the formation of azurite in the reaction series mentioned above, with increasing pH values. The reverse reactions are very rare in nature. W. Eitel

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15-57-1-394

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 63 (USSR)

AUTHOR: Shcherbina, V. V.

TITLE: The Chemistry of Mineral Growth in Sedimentary Rocks (Khimiya protsessov mineraloobrazovaniya v osadochnykh porodakh)

PERIODICAL: Vopr. mineralogii osadoch. obrazovaniy. Books 3-4. L'vov. L'vovsk. un-t, 1956, pp 27-38.

ABSTRACT: All varieties of sedimentary mineral growth may be expressed by the following geochemical processes. 1) Hydrolysis occurs because of a change of pH. Hydrolysis is most important for elements that occur in nature in combinations of various valences. These combinations in different degrees of oxidation begin to hydrolyze at different values of pH. 2) Oxidation-reductions reactions play an important role. They include changes in chemical properties of ions of any elements that enter combinations in a new valence.

Card 1/3

15-57-1-394

The Chemistry of Mineral Growth in Sedimentary Rocks (Cont.)

These changes indicate the solubility and volatility and, consequently, the capacity of elements to be dispersed or to be concentrated because of changes in their valence. Reducing processes, changing V to the trivalent form, Mo, U, and Re to the quadrivalent form, Cu to the univalent form, and Ag even to the native state, effect concentrations of these elements. Oxidation processes favor dispersion of the elements. 3) Reactions in the formation of difficulty soluble salts are also of considerable importance. The high-valence cations Ti^{4+}, Mn^{4+}, Fe^{3+}, and Al^{3+} occur characteristically in the oxide and hydroxide form. Al occurs in the aluminosilicate form. Phosphorite is the most widespread of the phosphatic formations. The alkali metals are found predominantly as chlorides; Sr and Ba occur in sulfides; and Ca and Mg are represented chiefly by carbonates. 4) Another type of reaction occurs in the formation of sediments by the decomposition of easily soluble combinations. The simplest of bicarbonates and the formation of more difficulty soluble carbonates. 5) Coagulation of sols and recrystallization of gels lead to the formation of aluminosilicates, ferricilicates,

Card 2/3

15-57-1-394

The Chemistry of Mineral Growth in Sedimentary Rocks (Cont.)

chlorite-like minerals, and hydrosilicates of Ni and Cu. 6) Minerals may be formed by sorption and subsequent recrystallization of the sorbed combinations. An example of this process is the formation of the vanadate of ferric oxide, fervanite, during sorption of the vanadate ion in brown iron ores. 7) Minerals are also formed by biogenic processes. Such deposits include huge masses of coal, limestone, organic phosphate, diatomite, etc.

Card 3/3

G. A. G.

SHCHERBINA, V. V.

15-57-7-9485

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7, p 108 (USSR)

AUTHOR: Shcherbina, V. V.

TITLE: The Transfer of Chemical Elements During Mineral Growth and the Conditions Governing Their Concentration (Formy perenosa khimicheskikh elementov v protsessakh mineralocbrazovaniya i usloviya ikh kontsentratsii)

PERIODICAL: V sb: Vopr. geokhimii i mineralogii, Moscow, 1956, pp 72-82.

ABSTRACT: In the transfer and deposition of substances in geological processes--both in fracture filling and in metasomatism--two types may be distinguished: 1) deposits associated with normal crystallization from solution; the composition of the deposited material corresponds to the composition of the dissolved material; and 2) deposits resulting from chemical reaction with migrating solutions or melts, forming new,

Card 1/4

15-57-7-9485

The Transfer of Chemical Elements During Mineral Growth (Cont.)

difficultly soluble combinations. A study of natural processes
indicates a distinct predominance of the second type. The first
type includes evaporated salt, gypsum, barite, quartz from warm
solutions, sublimates of halogenides and sulfides (MoS_2). The second
type includes, in particular, ore deposits resulting from dissoci-
ation of combinations with volatile compounds passing through the
rock during rapid lowering of the pressure (e.g., the formation of
siderite $Fe(HCO_3)_2 \longrightarrow FeCO_3 + H_2O + CO_2$; resulting from dissoci-
ation of easily soluble complex sulfides because of decreased concen-
tration of SH^{1-} and S^{2-} ions in the solution; and resulting from
interaction of sulfurous combinations with the oxides of Fe minerals
of the host rocks or with carbonic acid, oxidations of sulfides by
oxygen, etc.) Examples: 1) the formation of stibnite: $2Na_3SbS_3 +$
$3H_2O \longrightarrow Sb_2S_3 + 3NaSH + 3NaOH$; 2) the formation of native gold:
$2Na_3AuS_3 + 3FeCO_3 \longrightarrow 2Au + 3FeS_2 + 3Na_2CO_3$; 3) the deposition of
cinnabar: $Na_2HgS_2 + H_2O + O \longrightarrow H_2S + 2NaOH + (S)$, etc. Ore depo-
sition may also be due to decomposition of complex anions of hetero-
polyacids, such as the formation of low-temperature wolframite:
Card 2/4

15-57-7-9485

The Transfer of Chemical Elements During Mineral Growth (Cont.)

$[Si(W_3O_{10})_4]^{4-} + 4H^+ + 12FeO \longrightarrow 12FeWO_4 + SiO_2 + 2H_2O$. Or the mineralization may be due to high-temperature hydrolysis of highly volatile or easily soluble combinations, such as the formation of high-temperature wolframite and topaz: $WOF_4 + FeO + 2KalSi_3O_8 \longrightarrow FeWO_3 + Al_2SiO_4F_2 + 5SiO_2 + 2KF$; the formation of scheelite-bearing skarns in limestones: $WO_2Cl_2 + 2CaCO_3 \longrightarrow CaWO_4 + CaCl_2 + 2CO_2$; the formation of cassiterite: $Na_2Sn(OH)_4F_2 \Leftrightarrow SnO_2 + 2NaF + 2H_2O$; etc. In addition, the author distinguishes mineral formations dependent on oxidation-reduction reactions, resulting from ionic exchange and dissociation consequent on the disturbance of equilibrium by change of temperature and pressure. In considering the forms and conditions of transfer, and also the nature of the ore-bearing solution, the following are suggested: the nature and intensity of alteration in the host rocks; the chemical composition and properties of the deposited and altered minerals; the paragenetic associations of the minerals--their composition, quantitative relations, and sequence of crystallization; the morphogenetic peculiarities of the minerals and the presence of isomorphous chemical elements that are geochemical indicators. The author shows that it

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15-57-7-9485

The Transfer of Chemical Elements During Mineral Growth (Cont.)

is possible that different forms of transfer and different kinds of reactions, leading to deposition, may exist for one particular element under different conditions.

Card 4/4

O. V. Bryzgalin

SHCHERBINA, V.V.

Problems of geochemistry at the Geneva Conference. Geokhimiia no.1:118-119 '56. (MLRA 9:9)

(Geneva--Atomic power--Congresses)

SHCHERBINA, V. V.

12

3

2

/ Formation and dissolving of autunite. V. V. Shcherbina and L. I. Ignatova. *Geokhimiya* 1956, No. 2, 67-81.—Autunite, $Ca(PO_4)_2(UO_2)_2.8H_2O$, is one of the most widely distributed U minerals, but curiously enough it is absent in some large deposits, such as the one in the Belgian Congo. Field evidence and exptl. data have been gathered to find the conditions that are unfavorable to the existence of autunite. In general, there is field evidence that when the surface solns. have a pH greater than 7 (and carry silica), autunite is transformed into phosphouranylite and uranophane. New data on the soln. of autunite in 1% and 5% Na_2CO_3 and $NaHCO_3$ solns. are given in graphs. Finally, the principle of "antagonism" between certain minerals, or "forbidden associates," is shown to explain the absence of autunite in some deposits where one would expect to find it; a Ca uranyl phosphate reacts with Cu uranyl silicate to give Cu uranyl phosphate, torbernite, and a Ca uranyl silicate; hence autunite and Cu uranyl silicate cannot exist in the same deposit. Pb, in place of Ca, behaves similarly but with more complexity.

V. H. Gottschalk

4E

SHCHERBINA, V. V.

Geo

The geochemical significance of the quantitative Ag/Au ratio. V. V. Shcherbina (V. I. Vernadskii Inst. Geochem. and Anal. Chem., Acad. Sci. U.S.S.R., Moscow). *Geokhimiya* 1956, No. 3, 65–73.—As a unique geochem. indicator, the Ag/Au ratio had not yet been considered in the literature. On the basis of the different ratios in the different deposits, rocks, and minerals the following general conclusions can be drawn: (1) enrichment by Au is observed chiefly in higher temp. and deeper deposits, and by Ag in lower-temp. deposits of medium depth and near the surface, this being explained by the vapor pressure of these elements; (2) the older deposits are more often enriched with Au than Ag; (3) deposits formed from more alk. hydrothermal solns. are richer in Au than Ag; (4) if Au predominates in telluride ores, then in selenide ores Ag predominates; (5) the Ag/Au ratio depends on the metallogenic features of the regions; (6) in surface processes the transport chemically is accomplished more easily for Ag than for Au; and (7) the higher ratio of Ag to Au in sea water than in the lithosphere indicates the greater migration capacity of Ag than Au. 23 references. Gladys S. Macy

SHCHERBINA, V.V.

"Materials for the study of secondary uranium minerals in France [in French] from: Science de la Terre, III, no.1-2, 1-190, 1955)." J.Cherwet, G.Branche. Reviewed by V.V.Shcherbina. Geokhimiia no.3:87-88 '56.
(France--Uranium) (MLRA 9:9)

SHCHERBINA, V.V.

Chemical processes of mineral formation in sedimentary rocks.
Vop.min.osad.obr. 3/4:27-38 '56. (MLRA 9:11)
(Rocks, Sedimentary) (Geochemistry)

SHCHERBINA, V.V.

Session on the occasion of the 11th anniversary of the death of Academician A.E. Fersman. Geokhimiia no.4:76 '56. (MLRA 9:11)

(Fersman, Aleksandr Evgen'evich, 1883-1945)

SHCHERBINA, V.V.

Complex compounds and the transfer of elements in the zone of hypergenesis. Geokhimiia no.5:54-60 '56. (MIRA 10:1)

1. Vsesoyuznyy institut mineral'nogo syr'ya, Moskva.
(Geochemistry)

SHCHERBINA, V.

Twentieth session of the International Geological Congress in Mexico. Geokhimiia no.7:77-79 '56. (MLRA 10:1)
(Mexico (City)--Geology--Congresses)

SHCHERBINA, V.

"Physics and chemistry of the earth" [in English] by L.H.Ahrens, K.Rankama, S.K.Runcorn. Reviewed by V.Shcherbin. Geokhimiia no.8: 78-79 '56. (MLRA 10:2)

(Geochemistry) (Ahrens, L.H.) (Rankama, K.)
(Runcorn, S.K.)

[illegible] [Ya.]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Vol. [illegible], No. [illegible], [illegible]

KRASNIKOV, V.I., glavnyy red.; BRODSKIY, A.A., red.; PEREL'MAN, A.I., red.; SAUKOV, A.A., red.; SAFRONOV, N.I., red.; SERGEYEV, Ye.A., red.; KHITAROV, N.I., red.; SHARKOV, Yu.V., red. SHCHERBINA, V.V., red.; GUROVA, O.A., tekhn.red.

[Geokhimicheskie poiski rudnykh mestorozhdenii v SSSR; trudy soveshchaniia. Pod red. V.I.Krasnkova. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1957. 466 p. (MIRA 11:3)

1. Vsesoyuznoye soveshchaniye po geokhimicheskim metodam poiskov rudnykh mestorozhdeniy. 1st, Moscow, 1956.
(Geochemical prospecting)

SHCHERBINA, V.V.

Uranium and thorium behaviour in sulphate-carbonate and phosphate media of the hypergenesis zone [with summary in English]. Geokhimiia AN SSSR no.6:493-507 '57. (MIRA 11:2)

1. Vsesoyuznyy institut mineral'nogo syr'ya, Moskva.
(Uranium) (Thorium)

SHCHERBINA, V.V.

Methods of geochemical investigation abroad. Zap. Vses. min. ob-va
86 no.2:294-300 '57. (MLRA 10:6)
(Geochemical prospecting)

SHCHERBINA, V.V.; SHPIS, K.V., NESMEYANOV, A.N., akademik, glav. red.; TOPCHIYEV, A.B., akademik, zam. glav. red.; ISAKOVA, O.B., otvetstvennyy red.; LIKHTENSHTEYN, E.S., otvetstvennyy red.; SHUNKOV, V.I., otvetstvennyy red.; MEL'NIKOVA, N.B., red. izd-va; POLESITSKAYA, S.M., tekhn. red.

Dmitrii Ivanovich Shcherbakov. Vstup. stat'ia V.V. Shcherbiny. Bibliogr. sost. K.V. Shpis. Moskva, 1958. 56 p. (Materialy k biobibliografii uchenykh SSSR. Seriia geologicheskikh nauk, no.13). (MIRA 11:7)

1. Akademiya nauk SSSR.
(Shcherbakov, Dmitrii Ivanovich, 1893-)

GINZBURG, A.I.; NECHAYEVA, Ye.A.; LAVRENEV, Yu.B.; POZHARITSKAYA, L.K.; MALYSHEV, I.I., red.; RODIONOV, G.G., red.; FAGUTOV, F.P., red.; KHRUSHCHOV, N.A., red.; CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V., red.; SHCHERBINA, V.V., red.; EYGELES, M.A., red.; OVCHINNIKOVA, S.V., red.; AVERKIYEVA, T.A., tekhn.red.

[Rare metal carbonatites] Redkometal'nye karbonatity. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhr.nedr, 1958. 126 p. (Geologiia mestorozhdenii redkikh elementov, no.1)
(MIRA 12:2)

(Carbonates (Geology))

FERSMAN, Aleksandr Yevgen'yevich, akademik; SHCHERBAKOV, D.I., akademik, otvetstvennyy red.; KAPUSTINSKIY, A.F., red.; LEBEDEV, V.I., doktor geol.-min.nauk, red.; SAUKOV, A.A., red.; SHCHERBINA, V.V.,doktor geol.-min.nauk, red.; KUN, N.R., red.izd-va; MOSKVICHEVA, N.I., tekhn.red.

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akad. nauk SSSR. Vol.4. 1958. 588 p. (MIRA 11:4)

1. Chlen-korrespondent AN SSSR (for Kapustinskiy, Saukov)
(Geochemistry)

SHCHERBINA, V.

"Geochemistry of Uranium in Oxidation Zone of Ore Deposits According to Experimental Data."

paper to be presented at the 2nd UN Intl. Conf. on the peaceful uses of Atomic Enerfy, Geneva, 1 - 13 Sep 58.

3(0), 3(8) SOV/7-58-8-7/8

AUTHOR: Shcherbina, V. V.

TITLE: Problems of Geochemistry at the Second International Geneva Conference on Peaceful Uses of Atomic Energy (Voprosy geokhimii na II Zhenevskoy mezhdunarodnoy konferentsii po mirnomu ispol'zovaniyu atomnoy energii)

PERIODICAL: Geokhimiya, 1958, Nr 8, pp 757 - 759 (USSR)

ABSTRACT: The second Geneva conference took place from September 1, 1958 to September 13. Problems of geology and geochemistry were but little dwelt on in section "E". Three sessions were devoted to problems of raw materials, one of them particularly to the geochemistry of radioactive material; two sessions dealt with resources of raw material, geology, mineralogy, and prospecting methods. Three non-official sessions were held for the discussion of (1) resources, (2) geochemistry, (3) mineralogy, geology, and prospecting methods. Altogether 125 reports were presented, three geologists from the USSR contributed 12 reports. One lecture, presented by the USSR concerned the new deposits of uranium found in the USSR. Reports on geochemistry were chiefly

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Problems of Geochemistry at the Second International Geneva Conference on Peaceful Uses of Atomic Energy SOV/7-58-8-7/8

presented by the Soviet Union: R. P. Rafal'skiy lectured on the process of hydrothermal formation of uranium ores; a paper of Ye. V. Rozhkova et al. concerned the absorption of uranium by different mineral adsorbents, on the basis of experimental works of V. V. Shcherbina. A. P. Vinogradov spoke about the formation of the earth crust. Investigations on the distribution of rare elements and on isotope ratios form the experimental basis of his theory.

SUBMITTED: October 2, 1958

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GERASIMOVSKIY, Vasiliy Ivanovich; SHCHERBINA, V.V., prof., otv.red.;
BOYARSKIY, V.A., red.izd-va; YEGOROVA, N.F., tekhn.red.

[Deposits of uranium in foreign countries] Mestorozhdeniia
urana zarubezhnykh stran. Moskva, Izd-vo Akad.nauk SSSR,
1959. 140 p. (MIRA 12:12)
(Uranium ores)

SHCHERBINA, V.V.

21(4) PHASE I BOOK EXPLOITATION SOV/2714

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958

Doklady sovetskikh uchenykh; yadernoye goryucheye i reaktornyye metally. (Reports of Soviet Scientists; Nuclear Fuel and Reactor Metals) Moscow, Atomizdat, 1959. 670 p. (Series: Its: Trudy, vol. 3. 8,000 copies printed.

Ed. (Title page): A.A. Bochvar, Academician, A.P. Vinogradov, Academician, V.S. Yemel'yanov, Corresponding Member, USSR Academy of Sciences, and A.P. Zefirov, Doctor of Technical Sciences; Ed. (Inside book): V.V. Pereverzev and G.M. Pchelintseva; Tech. Ed.: E.I. Mazel'.

PURPOSE: This volume is intended for scientists, engineers, physicians, and biologists working in the production and peaceful application of atomic energy; for professors and students of schools of higher technical education where the subject is taught; and for people interested in atomic science and technology.

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COVERAGE: This is volume 3 of a 6-volume set of reports on atomic energy, presented by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy, held in Geneva from September 1 to 13, 1958. Volume 3 consists of two parts. The first part, edited by A.I. Zubov, is devoted to geology, prospecting, concentration and processing of nuclear source material. The second part, edited by G.L. Zverev, includes 27 reports on metallurgy, metallography, processing technology of nuclear fuels and reactor metals, and neutron irradiation effects on metals. The titles of the individual papers in most cases correspond word for word with those in the official English language edition on the Conference proceedings. See SOV/2081 for the titles of the other volumes of the set.

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